

REMARKS

In the Office Action mailed March 24, 2006, the Examiner noted that claims 1-8, 13-18, 20, 22 and 24 were pending for consideration, that claims 9-12, 19, 21, 23 and 25 have been withdrawn from consideration, allowed claims 1-8, 14, 15, 17, 18, 20, 22 and 24, and rejected claims 13 and 16. Claims 13 and 16 have been amended, and, thus, in view of the forgoing claims 1-8, 13-18, 20, 22 and 24 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejection is traversed below.

On page 3 of the Office Action, the Examiner rejected claims 13 and 16 under 35 U.S.C. § 102 as anticipated by Imaizumi.

With respect to claim 13, it appears that the Examiner is taking an unwarranted interpretation of the teachings of Imaizumi. According to the Examiner, Imaizumi teaches determining whether a pixel is white in a first binarization process by comparing to a threshold. However, the Examiner admits that Imaizumi "always performs a second binarization" (see Action, page 3). In the prior response we pointed out not only the determination of whether a pixel is white but also that the process of claim 13 performs the second binarization "when the target pixel is determined as a white pixel by the local binarization performed by said first binarization device". The second binarization, as claimed, is a conditional binarization (see the definition of "when" - "in the event that" found in Merriam-Webster Online Dictionary copyright © 2005 by Merriam-Webster, Incorporated). The Examiner appears to have ignored this common and ordinary usage interpretation of the term "when" as a conditional. Instead, the Examiner appears to be arguing that because Imaizumi always performs the second binarization, Imaizumi, by necessity, must also perform a second binarization when a target pixel is white. The Examiner is requested to reconsider this position, and consider the language of the claim and withdrawal of the rejection of claim 13 on this basis is requested.

In addition, claim 13, has been clarified to emphasize that the second binarization is done only when the target pixel is white ("a second binarization device performing local binarization again on pixels which are determined as white pixels in a vicinal area of the target pixel only when the target pixel is determined as a white pixel by the local binarization performed by said first binarization device."). This feature is discussed on application page 19, lines 4-13. Imaizumi does not teach or suggest such as since Imaizumi "always performs a second binarization" as acknowledged by the Examiner as noted above. Withdrawal of the rejection of claim 13 on this additional basis is requested.

In a first allegation, with respect to claim 16, the Examiner asserts that Imaizumi teaches the "determining whether a target pixel is a background based on complexity of a pattern in a vicinal area of a target pixel" of claim 16 at col. 7, lines 15-28. This, respectfully, does not appear to be correct. This portion of Imaizumi particularly states:

FIG. 3A shows an image 201 as one example where the halftone processing unit 120 has binarized image data of an image from a newspaper. For information, the image 201 is from a Japanese newspaper and the characters (forming two sentences in this case) of the image 201 are written vertically with the first sentence starting from the top right-hand corner of the image 201. In general, the background of a newspaper is halftone. When the halftone processing unit 120 binarizes image data of a document having a halftone background, black dots (or, black pixels) are diffused in parts that correspond to the halftone background while they are dense in parts that correspond to the characters as shown in FIG. 3A. The human eye perceives diffused dots as halftone and dense dots as black. (See Imaizumi, col. 7, lines 15-28)

As can be seen, the above text says nothing about making a determination based on complexity of a pattern much less doing do to determine a background. This text merely discusses the visual characteristics of halftone processing. Withdrawal of the rejection of claim 16 on this basis is requested.

In a second allegation, with respect to claim 16, the Examiner asserts that Imaizumi teaches "performing again a local binarization of the target pixel based on a determination result of said determination device" of claim 16 at col. 3, lines 25-30. Again, respectfully, this does not appear to be correct. This text of Imaizumi particularly states:

The first object of the present invention can be also achieved by an image processing apparatus made up of: a receiving unit which receives image data of a document image; a first binarizing circuit which binarizes the image data received by the receiving unit to generate first binarized image data, according to a first method; an image processing circuit which performs an image process on the first binarized image data; a second binarizing circuit which binarizes the image data received by the receiving unit to generate second binarized image data, according to a second method that is different from the first method; and a recognition controller which recognizes an orientation of the document image using the second binarized image data. (See Imaizumi, col. 3, lines 21-33, inclusive of lines 25-30)

The above text says nothing about performing a binarization again based on a determination result. This text merely discusses multiple binarizations and the use of one of the binarizations for orientation recognition. Withdrawal of the rejection of claim 16 on this further basis is requested.

In addition, claim 16, has been clarified to emphasize that the feature of "performing again a local binarization of the target pixel only based on a determination result of said determination device". Imaizumi does not teach or suggest such. Withdrawal of the rejection of claim 16 on this still further basis is requested.

It is submitted that the present claims 13 and 16 patentably distinguish over Imaizumi and withdrawal of the rejection is requested.

It is submitted claims 1-8, 14, 15, 17, 18, 20, 22 and 24 continue to be allowable. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: /J. Randall Beckers/
J. Randall Beckers
Registration No. 30,358

1201 New York Ave, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501